

WHAT IS CLAIMED IS:

1. A system controller in which a plurality of CPUs connected through a shared bus are connected to a plurality of memory units or IO devices through a  
5 bus for separate transfer of a read instruction from a read data return, comprising:

holding means for holding a CPU which issues a new instruction and a destination of the instruction, and a CPU which issues an instruction being suspended  
10 and a destination of the instruction;

order control means for controlling an issue order of return data and a transfer instruction based on held contents of said holding means in a read time; and

15 issue means for issuing transfers, which are first serialized and transferred through the shared bus, in parallel using a plurality of connection paths.

20 2. The system controller according to claim 1, further comprising

means for queuing a transaction request output to the shared bus after bus snooping through the shared bus.

25

3. The system controller according to claim 1, wherein

said order control means comprises  
determination means for determining whether or not a  
transaction can be issued in response to a read  
request based on the held contents of said holding  
5 means.

4. The system controller according to claim 3,  
wherein

said determination means determines that the  
10 transaction cannot be issued when a destination of a  
new instruction is IO, and a transfer of an  
instruction to a different IO is suspended.

5. The system controller according to claim 3,  
15 wherein

said determination means determines that the  
transaction cannot be issued when a destination of a  
new instruction is memory, and a transfer of an  
instruction issued by a different CPU is suspended.

20